

IN THE CLAIMS:

Please cancel claim 2-6. Please amend claims 1, 7, 9 and add new claim 14 per the following:

1. (Currently Amended). A method to determine the angular orientation between two surfaces using:

- A. a first frame that is aligned to one of said two surfaces, and
- B. a second frame that is aligned to the other of said two surfaces, and
- C. at least two measuring points are defined on said first frame at a known distance apart, and
- D. a line connecting said at least two measuring points on said first frame is aligned parallel with said first surface, and
- E. at least two measuring points are defined on said second frame at the same said known distance apart, and
- F. a line connecting said at least two measuring points on said second frame is aligned parallel with said second surface, and
- G. said at least two measuring points on said first frame and said at least two measuring points on said second frame are approximately in the same plane, and
- H. the positions of said at least two measuring points on said first frame are measured relative to the positions of said at least two measuring points on said second frame by use of a length measuring device,

whereby said angular orientation between said two surfaces is determined in said plane.

2. – 6. (Canceled)

7. (Currently Amended). The method according to claim 1 where at least one of said relative position measurements is measured by using ~~a rigid member with an attached length measuring device~~ said length measuring device which is attached to a rigid member.

8. (Original). The method according to claim 1 where said two surfaces are the radial surfaces of a roll.

9. (Currently Amended). The method according to claim 1 where said at least two measuring points on said first frame and said at least two measuring points on said second frame are represented by solid geometric shapes.

10. (Original). The method according to claim 7 where the length of said rigid member is adjustable.
11. (Original). The method according to claim 8 where a rigid member is attached to said first frame and said second frame in a manner to prevent rotation of said rolls.
12. (Original). The method according to claim 9 where said small geometric shapes are sections of a sphere.
13. (Original). The method according to claim 12 where the length measuring instrument that measures the relative positions between said sections of a sphere incorporates ends that are counter-bored.
14. (New). A method to determine the angular orientation between two surfaces using:
 - A. a first frame that is aligned to one of said two surfaces, and
 - B. a second frame that is aligned to the other of said two surfaces, and
 - C. at least two measuring points are defined on said first frame at a known distance apart, and
 - D. a line connecting said at least two measuring points on said first frame is aligned parallel with said first surface, and
 - E. at least two measuring points are defined on said second frame at the same said known distance apart, and
 - F. a line connecting said at least two measuring points on said second frame is aligned parallel with said second surface, and
 - G. said at least two measuring points on said first frame and said at least two measuring points on said second frame are approximately in the same plane, and
 - H. the positions of said at least two measuring points on said first frame are measured relative to the positions of said at least two measuring points on said second frame, and
 - I. at least one of said relative position measurements is measured by using the change in length of a string under tension,whereby said angular orientation between said two surfaces is determined in said plane.

IN THE ABSTRACT:

Please amend the original abstract to combine the original two paragraphs into one paragraph and make one grammatical correction. The deletion of the new paragraph character is shown by empty double brackets.

A device and method is disclosed that measures the angular orientation of one surface to another. The device consists of two frames with defined measuring points. The relative distances between the points are measured and then used to determine the angular orientation of the surfaces relative to each other. The measuring method is adapted for the accurate measurement of very small angular differences. [[]] The frames can be adapted to measure the angular orientation of many surfaces that are otherwise difficult to measure. The device is particularly suited to measuring small parallel angular differences between two rolls.